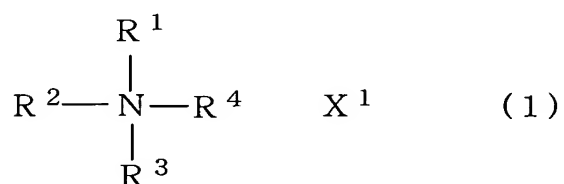


ABSTRACT OF THE DISCLOSURE

An electrolytic solution for use in nonaqueous electrolytic lithium secondary cells which contains a room temperature molten salt, i.e., an aliphatic quaternary ammonium salt of the formula (1), an organic solvent and a lithium salt of the formula (2), the electrolytic solution being characterized in that the organic solvent contains vinylene carbonate in an amount of 1 to 5 wt. % based on the electrolytic solution, and a lithium secondary cell using the electrolytic solution



wherein R^1 to R^3 are each a chain hydrocarbon having 1 to 4 carbon atoms, R^4 is methoxymethyl, ethoxymethyl, propoxymethyl or isopropoxymethyl, and X^1 and X^2 are each a fluorine-containing anion.